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2016 Protocols

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# Cellulose Media Preparation

Adapted from Pratima Gupta, Kalpana Samant, and Avinash Sahu,  
"Isolation of Cellulose-Degrading Bacteria and Determination of Their Cellulolytic Potential,"  
International Journal of Microbiology, doi:10.1155/2012/578925

Required Materials:

- $\text{KH}_2\text{PO}_4$  0.5 g
- $\text{MgSO}_4$  0.25 g
- Cellulose (ground Whatman paper) 2 g
- Agar 15 g
- Congo-red 0.2 g
- Gelatin 2 g
- Distilled water 1 L
- 100mm x 15mm Clear and Sterile Petri Plates

Procedure:

1. In a blender, grind Whatman paper into a fine pulp.
2. Combine  $\text{KH}_2\text{PO}_4$ ,  $\text{MgSO}_4$ , cellulose, agar, Congo-red, gelatin, and water together.
3. Autoclave media until sterile.
4. Let cool to  $50^\circ\text{C}$  before pouring into sterile petri plates.
5. Let plates cool completely before drying. To dry:
  - a. Place petri plates media side up in a laminar flow hood, set the plate on the side of the lid so that the plate is slightly uncovered, and allow to dry for 15 minutes.
  - b. Plate petri plates media side up in a  $37^\circ\text{C}$  incubator overnight.